

WHAT IS CLAIMED IS:

1 1. A network system, comprising:

2 at least one network unit having a variable Internet protocol (IP) address and unique
3 identification information; and

4 an agent server, including a database for receiving and storing said variable IP address
5 and said unique identification information from said at least one network unit, and a control unit
6 for receiving said unique identification information of said at least one network unit from a user
7 over a network, for searching said database for said variable IP address of said at least one
8 network unit on the basis of the received unique identification information, and for enabling the
9 user to gain access to said at least one network unit in accordance with results of the searching of
10 said database.

2 2. The network system as set forth in Claim 1, wherein said agent server further includes
3 a communication unit for receiving said unique identification information and said variable IP
4 address from said at least one network unit, and for transferring said unique identification
5 information and said variable IP address to said database.

1 3. The network system as set forth in Claim 2, wherein said unique identification
2 information includes at least one of an Ethernet address of said at least one network unit, an
3 identifier of said at least one network unit, and a search keyword for said variable IP address of

4 said at least one network unit.

1 4. The network system as set forth in Claim 3, wherein said control unit receives at least
2 one of said Ethernet address, said identifier of said at least one network unit, and said search
3 keyword from the user over said network, compares said at least one of said Ethernet address,
4 said identifier of said at least one network unit, and said search keyword with data stored in said
5 database to produce a match, and searches for said variable IP address when the match is
6 produced.

1 5. The network system as set forth in Claim 4, wherein said data stored in said database
2 is updated at regular time intervals.

1 6. The network system as set forth in Claim 2, wherein said data stored in said database
2 is updated at regular time intervals.

1 7. A method of controlling a network system having an agent server and at least one
2 network unit, said method comprising the steps of:

3 (a) storing unique identification information and a variable IP address of said at least one
4 network unit in a database in said agent server;

5 (b) receiving data from a user over a network, comparing said received data with said
6 unique identification information stored in said database, and searching for said variable IP

address of said at least one network unit when said comparing produces a match; and

(c) connecting the user to said at least one network unit having the searched variable IP address.

8. The method as set forth in Claim 7, further comprising the steps of receiving said unique identification information and said variable IP address of said at least one network unit, and transferring said unique identification information and said variable IP address of said at least one network unit to said database in said agent server.

9. The method as set forth in Claim 8, wherein said unique identification information includes at least one of an Ethernet address of said at least one network unit, an identifier of said at least one network unit, and a search keyword for said variable IP address of said at least one network unit.

10. The method as set forth in Claim 9, wherein said data received in step (b) comprises at least one of said Ethernet address, said identifier and said search keyword.

11. The method as set forth in Claim 10, wherein data stored in said database is updated at regular time intervals.

12. The method as set forth in Claim 9, wherein data stored in said database is updated at

2 regular time intervals.

1 13. A network system comprising an agent server and at least one network unit having a
2 variable Internet protocol (IP) address and unique identification information, said agent server,
3 comprising:

4 storing means for receiving and storing said variable IP address and said unique
5 identification information for each said at least one network unit;

6 receiving means for receiving, from a user, unique identification information for a
7 network unit selected by the user;

8 searching means for searching said storing means for said variable IP address of said
9 selected network unit on the basis of the unique identification information received from the
10 user; and

11 enabling means responsive to results produced by said searching means for enabling the
12 user to gain access to said selected network unit.

1 14. The network system as set forth in Claim 13, wherein said storing means comprises a
2 database and a communication unit, said communication unit receiving said unique identification
3 information and said variable IP address, and transferring said unique identification information
4 and said variable IP address to said database.

1 15. The network system as set forth in Claim 14, wherein said unique identification

information includes at least one of an Ethernet address of said at least one network unit, an identifier of said at least one network unit, and a search keyword for said variable IP address of said at least one network unit.

16. The network system as set forth in Claim 15, wherein said receiving means comprises a control unit which receives, from the user, at least one of an Ethernet address, an identifier and a search keyword corresponding to the network unit selected by the user.

17. The network system as set forth in Claim 14, wherein data stored in said database is updated at regular time intervals.

18. The network system as set forth in Claim 13, wherein said receiving means comprises a control unit which receives, from the user, at least one of an Ethernet address, an identifier and a search keyword corresponding to the network unit selected by the user.

19. A method of controlling a network system having an agent server and at least one network unit, said method comprising the steps of:

(a) storing unique identification information and a variable IP address of each said at least one network unit in a database in said agent server;

(b) receiving, from a user, unique identification information corresponding to a network unit selected by the user;

7 (c) comparing said unique identification information received from the user with said
8 unique identification information stored in said database;

9 (d) determining said variable IP address of said network unit selected by the user when
10 step (c) produces a match; and

11 (e) connecting the user to said selected network unit having the determined variable IP
12 address.

1 20. The method as set forth in Claim 19, wherein said unique identification information
2 includes at least one of an Ethernet address of said at least one network unit, an identifier of said
3 at least one network unit, and a search keyword for said variable IP address of said at least one
4 network unit.

1 21. The method as set forth in Claim 20, wherein the unique identification information
2 received from the user in step (b) comprises at least one of said Ethernet address, said identifier
3 and said search keyword.

1 22. The method as set forth in Claim 21, wherein said data stored in said database is
2 updated at regular time intervals.

1 23. The method as set forth in Claim 19, wherein the unique identification information
2 received from the user in step (b) comprises at least one of an Ethernet address, an identifier and

3 a search keyword.

1 24. The method as set forth in Claim 19, wherein said data stored in said database is
2 updated at regular time intervals.